

# Feature Flags

**Play+ Feature Flag Helper Introduction** ■ In the Play+ ecosystem, we believe shipping code should be empowering, not risky. This helper is based on the concept of decoupling deployment from release, a modern development practice that allows us to merge and deploy features to production safely, while precisely controlling their visibility. Feature flags (or toggles) are essential for mitigating risk, enabling A/B testing, and personalizing user experiences at scale. This aligns directly with our Adaptive pillar, allowing the application to change dynamically based on user context or business needs. It also promotes an Intuitive development workflow by simplifying a complex topic and makes the product more Engaging by allowing for controlled experiments with new features.

**Package Info** ■ The playfeature helper is provided through the @playplus/features package, which is included by default in the Golden Path.

Description	Package / Path	Golden Path (Recommended)
Pre-installed	/system/play.feature.ts	Uplift Path
npm install	@playplus/features	Folder Reference

■ The feature flag helper and its configuration follow our standardized folder structure for core system logic.

File / Directory	Purpose & Guidelines
system/play.feature.ts	The core feature flag service. It abstracts the third-party provider and provides a consistent API.
config/play.feature.config.json	User-overridable configuration for the flag provider, client keys, and default values for offline development.

**Helper - Pillars Alignment** ■ The playfeature helper is a key enabler of our core design pillars.

Pillar	How This Helper Aligns
Adaptive	Allows the application's UI and behavior to adapt in real-time based on user, region, or experimental group.
Intuitive	Abstracts the complexity of third-party SDKs into a simple, synchronous API, making it trivial for developers to use flags.
Engaging	Empowers teams to safely A/B test new, delightful features and interactions, gathering data to create more engaging experiences.

**Helper Overview** ■ The playfeature helper is your application's runtime control panel. It provides a clean, synchronous, and framework-agnostic interface to your feature flagging provider (e.g., LaunchDarkly, Optimizely, Flagsmith). Its purpose is to abstract the plumbing of flag management, so developers can focus on building features, not on SDK integration. Behind the scenes, the helper automates the entire process:

- Initialization** : On app startup, it connects to your flag provider using the configured client key.
- User Identification** : It automatically identifies the current user to fetch targeted flags.
- Real-time Updates** : It maintains a live connection, so any change made in your provider's dashboard

is reflected in the app in real-time, without a page refresh. Offline Graceful Degradation : If the provider is unreachable, it falls back to default values defined in the configuration. This means a developer can simply ask `playfeature.isEnabled('my-flag')` and trust that the system is handling all the complex state management in the background.

### Config Options

Global configuration is managed in `config/play.feature.config.json`.

Config Variable	Default Value	Description	Recommended Value
provider	"local"	The name of your feature flag provider (e.g., launchdarkly, flagsmith, optimizely). local uses bootstrap values.	Your provider's name.
clientKey	null	The client-side ID or key for your feature flag project. Your provider's client key.	
bootstrap	{}	An object of default flag values to use during initial load or for offline development and testing. Define key flags for testing.	Example

```
play.feature.config.json: { "provider": "launchdarkly", "clientKey": "sdk-12345-abcde",
"bootstrap": { "feat-new-dashboard-2025-q3": false, "enable-beta-analytics": true } }
```

### Helper Methods

The helper provides a simple, consistent API for accessing flag values.

Method Name	What It Does	Method Signature
isEnabled	Checks if a boolean feature flag is enabled. Returns defaultValue if the flag doesn't exist.	<code>isEnabled(key: string, defaultValue?: boolean): boolean</code>
getVariant	Gets the string value for a multivariate or experiment flag.	<code>getVariant(key: string, defaultVariant?: string): string</code>
onUpdate	Subscribes to all flag changes from the provider, allowing the UI to react in real-time.	<code>onUpdate(callback: () =&gt; void): void</code>
offUpdate	Unsubscribes from flag changes to prevent memory leaks.	<code>offUpdate(callback: () =&gt; void): void</code>

### Angular Integration

#### PlayFeatureService

Angular service wrapper that integrates with Play+ logging and provides component-specific feature flag utilities.

```
import { PlayFeatureService } from
'../services/playfeature.service';
@ Component ( { ... } ) export class MyComponent {
constructor ( private playFeature : PlayFeatureService ) { }
ngOnInit ( ) { if ( this .
playFeature . isEnabled ( 'feat-new-dashboard-2025-q3' , false ) ) { // Show new dashboard
} } }
```

#### PlayFeatureGuard

Route protection guard for feature flag-based access control.

```
// app-routing.module.ts
import { PlayFeatureGuard } from "../guards/play-feature.guard" ;
const routes : Routes = [ { path : "next-gen-dashboard" , loadChildren : ( ) => import (
"./next-gen/dashboard.module" ) . then ( ( m ) => m . DashboardModule ) , canActivate : [
PlayFeatureGuard ] , data : { featureFlag : "feat-next-gen-dashboard-enabled" ,
fallbackRoute : "/dashboard" , } , } , ] ;
```

#### FeatureFlagDirective

Template conditional rendering based on feature flags.

```
<!-- Boolean flags -->
< div *playFeatureFlag = " '
feat-new-dashboard-2025-q3' " >
< h2 > New Dashboard
</ h2 >
< p > This content is only
visible when the flag is enabled.
</ p >
<!-- Variant flags -->
< div *playFeatureFlag
```

```

= " ' feat-experiment'; playFeatureFlagVariant: 'treatment' " > < h2 > Experimental Feature
</ h2 > < p > This shows the treatment variant. </ p > </ div > FeatureFlagPipe ■ Template
flag checks and variant access. < ng-container = " ' feat-new-analytics' | playFeatureFlag "
> < app-analytics-widget > </ app-analytics-widget > </ ng-container > <!-- Display flag
status --> < p > </ p > <!-- Variant checks --> < p > </ p > React: The useFeature Hook ■
For a seamless experience in React, the starter kit provides a useFeature hook that
automatically subscribes to live updates. // hooks/useFeature.ts import { useState ,
useEffect } from "react" ; import { playfeature } from "../system/play.feature" ; export
function useFeature ( key : string , defaultValue : boolean ) : boolean { const [ value ,
setValue ] = useState ( ( ) => playfeature . isEnabled ( key , defaultValue ) ) ; useEffect ( ( )
=> { // A function to update state when flags change. const handleUpdate = ( ) => {
setValue ( playfeature . isEnabled ( key , defaultValue ) ) ; } ; // Set initial value and
subscribe to live updates. handleUpdate ( ) ; playfeature . onUpdate ( handleUpdate ) ; //
Clean up the subscription on component unmount. return ( ) => { playfeature . offUpdate (
handleUpdate ) ; } ; } , [ key , defaultValue ] ) ; return value ; } // In a component: //
MainDashboard.tsx import { useFeature } from "../hooks/useFeature" ; function
MainDashboard ( ) { const showNewAnalyticsCard = useFeature (
"feat-new-analytics-card" , false ) ; return ( < div > < UserInfoCard /> {
showNewAnalyticsCard ? < NewAnalyticsCard /> : < OldAnalyticsCard /> } </ div > ) ; }
Angular: The PlayFeatureGuard for Routes ■ For Angular, a CanActivate guard is the
perfect way to toggle access to entire feature routes. // guards/play-feature.guard.ts import
{ Injectable } from "@angular/core" ; import { CanActivate , ActivatedRouteSnapshot ,
Router } from "@angular/router" ; import { playfeature } from "@playplus/core" ; //
Assuming helper is available @ Injectable ( { providedIn : "root" } ) export class
PlayFeatureGuard implements CanActivate { constructor ( private router : Router ) { }
canActivate ( route : ActivatedRouteSnapshot ) : boolean { const flagName = route . data [
"featureFlag" ] ; if ( flagName && playfeature . isEnabled ( flagName ) ) { return true ; //
Allow access to the route } // If flag is off or doesn't exist, redirect away this . router .
navigate ( [ "/"dashboard" ] ) ; return false ; } } // app-routing.module.ts import {
PlayFeatureGuard } from "../guards/play-feature.guard" ; const routes : Routes = [ { path :
"next-gen-dashboard" , loadChildren : ( ) => import ( "../next-gen/dashboard.module" ) .
then ( ( m ) => m . DashboardModule ) , canActivate : [ PlayFeatureGuard ] , data : {
featureFlag : "feat-next-gen-dashboard-enabled" } , } , ] ; Service-based Flag Checks ■ **
Recommended: Use PlayFeatureService** import { PlayFeatureService } from

```

```

'../services/playfeature.service' ; @ Component ( { ... } ) export class MyComponent {
  constructor ( private playFeature : PlayFeatureService ) { } ngOnInit ( ) { if ( this .
  playFeature . isEnabled ( 'feat-new-dashboard-2025-q3' , false ) ) { // Show new dashboard
  } } } Reactive Flag Observables ■ ** Recommended: Use reactive observables** import {
  PlayFeatureService } from '../services/playfeature.service' ; @ Component ( { ... } ) export
  class MyComponent implements OnInit , OnDestroy { private destroy$ = new Subject <
  void > ( ) ; newDashboardEnabled = false ; constructor ( private playFeature :
  PlayFeatureService ) { } ngOnInit ( ) { this . playFeature . flag$ (
  'feat-new-dashboard-2025-q3' , false ) . pipe ( takeUntil ( this . destroy$ ) ) . subscribe (
  enabled => { this . newDashboardEnabled = enabled ; } ) ; } ngOnDestroy ( ) { this .
  destroy$ . next ( ) ; this . destroy$ . complete ( ) ; } } Additional Info ■ Why We Created
  This Helper ■ Without a centralized helper, each developer would need to: Integrate and
  learn a complex, third-party feature flag SDK. Manually handle user identification for
  targeted rollouts. Build their own logic for real-time updates and subscriptions. Write
  boilerplate code to handle cases where the flag provider is offline. This is inefficient and
  error-prone. The playfeature helper abstracts all of this into a single, reliable system. It
  provides a consistent, tested interface so developers can add or check a feature flag in a
  single line of code, trusting that the underlying complexity is managed for them. Best
  Practices ■ Keep Flags Short-Lived : Flags are temporary. Create a process for cleaning
  them up after a feature is fully rolled out to avoid technical debt. Use Descriptive Names :
  A good name like feat-newDashboard-rollout-2025-q3 is self-documenting. It tells you the
  feature, its purpose, and its expected lifespan. Abstract Flag Checks : Don't sprinkle
  playfeature.isEnabled() calls directly in JSX. Encapsulate the logic in a variable, hook
  (useFeature), or function for better readability and maintenance. Always Provide a Default
  Value : This ensures your application behaves predictably if the flagging service is down or
  a flag is deleted. Flag Naming Convention ■ ** Good Names:**
  feat-new-dashboard-2025-q3 enable-beta-analytics feat-secure-input-validation
  feat-performance-monitoring ** Bad Names:** newDashboard (no prefix) beta (too vague)
  flag1 (not descriptive) temp (temporary flags become permanent) Default Values ■ **
  Always provide safe defaults:** // Good - explicit default this . playFeature . isEnabled (
  "feat-new-dashboard" , false ) ; // Good - explicit default for variants this . playFeature .
  getVariant ( "feat-experiment" , "control" ) ; ** Avoid implicit defaults:** // Bad - relies on
  system default this . playFeature . isEnabled ( "feat-new-dashboard" ) ; Flag Abstraction ■
  ** Abstract flag checks:** // Good - abstracted in component export class

```

```

DashboardComponent { private readonly showNewDashboard = this . playFeature .
isEnabled ( "feat-new-dashboard-2025-q3" , false ) ; ngOnInit ( ) { if ( this .
showNewDashboard ) { this . loadNewDashboard ( ) ; } else { this . loadLegacyDashboard
( ) ; } } } ** Don't sprinkle flag checks everywhere:** // Bad - flag check in template logic
template : ` <!-- content --> </div> ` ; Flag Lifecycle Management ■ ** Plan flag cleanup:**
// Document flag purpose and cleanup plan /** * Flag: feat-new-dashboard-2025-q3 *
Purpose: Rollout new dashboard to 50% of users * Cleanup: Remove after Q3 2025 when
100% rollout is complete * Owner: team-core-ui */ Forbidden Patterns ■ 1. Direct
playfeature Access ■ ** Never access playfeature directly:** // DON'T DO THIS import {
playfeature } from ".././../system/play.feature" ; if ( playfeature . isEnabled ( "my-flag" ) ) { //
This violates Play+ guidelines } 2. Magic String Flag Names ■ ** Don't use magic strings:**
// DON'T DO THIS if ( this . playFeature . isEnabled ( "new-dashboard" ) ) { // Flag name
not in config } 3. Inline Flag Checks in Templates ■ ** Don't put complex flag logic in
templates:** <!-- DON'T DO THIS --> < div = "
playFeature.isEnabled('feat-new-dashboard') && user.hasPermission('admin') " > <!--
Complex logic in template --> </ div > 4. Flag Checks in Services ■ ** Don't check flags in
business logic services:** // DON'T DO THIS @ Injectable ( ) export class UserService {
getUsers ( ) { if ( this . playFeature . isEnabled ( "feat-new-api" ) ) { return this . newApi .
getUsers ( ) ; } ; return this . legacyApi . getUsers ( ) ; } } Required Patterns ■ 1. Use
PlayFeatureService ■ ** Always use the Angular service:** import { PlayFeatureService }
from '../services/playfeature.service' ; constructor ( private playFeature :
PlayFeatureService ) { } 2. Provide Default Values ■ ** Always provide explicit defaults:**
this . playFeature . isEnabled ( "feat-new-dashboard" , false ) ; this . playFeature .
getVariant ( "feat-experiment" , "control" ) ; 3. Use Reactive Patterns ■ ** Use observables
for reactive UI:** this . playFeature . flag$ ( "feat-new-dashboard" , false ) . pipe ( takeUntil
( this . destroy$ ) ) . subscribe ( ( enabled ) => { this . showNewDashboard = enabled ; } ) ;
4. Abstract Flag Logic ■ ** Encapsulate flag checks:** export class DashboardComponent
{ private readonly showNewDashboard = this . playFeature . isEnabled (
"feat-new-dashboard" , false ) ; ngOnInit ( ) { this . loadDashboard ( ) ; } private
loadDashboard ( ) { if ( this . showNewDashboard ) { this . loadNewDashboard ( ) ; } else {
this . loadLegacyDashboard ( ) ; } } } Configuration Management ■ Environment-specific
Configuration ■ // config/play.feature.config.json { "provider" : "launchdarkly" , "clientKey" :
"sdk-12345-abcde" , "bootstrap" : { "feat-new-dashboard-2025-q3" : false ,
"enable-beta-analytics" : true } } User Context ■ // Set user for targeted flags this .

```

```

playFeature . setUser ( { key : "user-123" , email : "user@example.com" , name : "John
Doe" , custom : { plan : "premium" , region : "us-west" , } , } ) ; Testing ■ Testing with
Different Flag States ■ ** Test with different flag states:** describe (
"DashboardComponent" , ( ) => { it ( "should show new dashboard when flag is enabled" , (
) => { // Arrange playFeatureService . setFlag ( "feat-new-dashboard-2025-q3" , true ) ; //
Act component . ngOnInit ( ) ; // Assert expect ( component . showNewDashboard ) . toBe
( true ) ; } } ; it ( "should show legacy dashboard when flag is disabled" , ( ) => { // Arrange
playFeatureService . setFlag ( "feat-new-dashboard-2025-q3" , false ) ; // Act component .
ngOnInit ( ) ; // Assert expect ( component . showNewDashboard ) . toBe ( false ) ; } } ) ; } ;
Testing Checklist ■ Test with flag enabled Test with flag disabled Test with flag not
defined (uses default) Test flag changes during runtime Test route protection with guard
Test directive conditional rendering Test pipe usage in templates Test user context
changes Test offline/fallback behavior Monitoring & Observability ■ Flag Usage Tracking
■ // Log flag usage for analytics this . playFeature . flag$ ( "feat-new-dashboard" , false ) .
pipe ( takeUntil ( this . destroy$ ) ) . subscribe ( ( enabled ) => { this . analytics . track (
"feature_flag_viewed" , { flag : "feat-new-dashboard" , enabled , user : this . currentUser .
id , } ) ; } ) ; Flag Performance Monitoring ■ // Monitor flag check performance const start =
performance . now ( ) ; const isEnabled = this . playFeature . isEnabled (
"feat-new-dashboard" , false ) ; const duration = performance . now ( ) - start ; if ( duration
> 10 ) { this . playlog . warn ( "Slow feature flag check" , { flag : "feat-new-dashboard" ,
duration , context : "dashboard-load" , } ) ; } Enforcement ■ ESLint Rules ■ The following
ESLint rules enforce Play+ feature flag patterns: No direct playfeature access - Forces use
of PlayFeatureService No magic string flag names - Requires flags to be defined in config
No inline flag logic - Encourages abstraction Code Review Checklist ■ Uses
PlayFeatureService instead of direct playfeature access Provides explicit default values
Uses reactive patterns where appropriate Abstracts flag logic from templates Follows
naming conventions Includes cleanup plan for new flags Tests cover different flag states
Migration Guide ■ From Direct playfeature Access ■ Before: import { playfeature } from
"./../system/play.feature" ; if ( playfeature . isEnabled ( "my-flag" ) ) { // logic } After:
import { PlayFeatureService } from './services/playfeature.service' ; constructor ( private
playFeature : PlayFeatureService ) { } if ( this . playFeature . isEnabled ( 'my-flag' , false ) )
{ // logic } From Manual Flag Management ■ Before: // Manual flag management private
flags = new Map < string , boolean > ( ) ; setFlag ( key : string , value : boolean ) { this .
flags . set ( key , value ) ; } isEnabled ( key : string ) : boolean { return this . flags . get ( key

```

) || false ; } After: // Use PlayFeatureService constructor ( private playFeature : PlayFeatureService ) { } setFlag ( key : string , value : boolean ) { this . playFeature . setFlag ( key , value ) ; } isEnabled ( key : string , defaultValue : boolean = false ) : boolean { return this . playFeature . isEnabled ( key , defaultValue ) ; } Troubleshooting ■ Common Issues ■ Flag not working - Check if flag is defined in config Service not initialized - Ensure PlayFeatureService.initialize() is called Route protection not working - Verify guard is properly configured Template not updating - Use reactive observables instead of one-time checks Debug Mode ■ // Enable debug logging this . playFeature . setFlag ( "debug-mode" , true ) ; // Check all current flags console . log ( "All flags:" , this . playFeature . getAllFlags ( ) ) ; // Check flag metadata const metadata = this . playFeature . getFlagMetadata ( "my-flag" ) ; console . log ( "Flag metadata:" , metadata ) ; Governance & Hygiene ■ As flag usage grows, discipline is key. Consider establishing formal governance rules: Flag Types : Categorize flags to clarify their purpose (e.g., release-toggle, experiment, ops-switch, kill-switch). Environments : Ensure your provider supports toggling flags independently across different environments (dev, staging, prod). Auditing : Your provider should have an audit log to track who created, toggled, or removed a flag. Lifecycle Metadata : Use tags or descriptions in your provider's UI to add context like owner: team-core-ui , jira: PROJ-123 , introduced: 2025-Q3 . Treat feature flags as first-class citizens in your architecture. Without good hygiene, they become technical debt. Compliance Notes ■ Feature flags must be documented with purpose and cleanup plan All flag names must follow naming conventions Flag changes must be logged for audit purposes User targeting must respect privacy regulations Flag performance must be monitored Unused flags must be cleaned up regularly Developer Checklist ■ Does my new flag have a descriptive name and a cleanup plan? Have I provided a safe defaultValue for my isEnabled check? Is the flag check abstracted (e.g., in a variable) rather than being inline in the UI logic? Have I added the flag to the bootstrap config for offline testing? If the flag is long-term, have I discussed its purpose with the team?

```
{
  "provider": "launchdarkly",
  "clientKey": "sdk-12345-abcde",
  "bootstrap": {
    "feat-new-dashboard-2025-q3": false,
    "enable-beta-analytics": true
  }
}
```

---

```

import { PlayFeatureService } from '../services/playfeature.service';

@Component({...})
export class MyComponent {
  constructor(private playFeature: PlayFeatureService) {}

  ngOnInit() {
    if (this.playFeature.isEnabled('feat-new-dashboard-2025-q3', false)) {
      // Show new dashboard
    }
  }
}

---

// app-routing.module.ts
import { PlayFeatureGuard } from './guards/play-feature.guard';

const routes: Routes = [
  {
    path: "next-gen-dashboard",
    loadChildren: () =>
      import("./next-gen/dashboard.module").then((m) => m.DashboardModule),
    canActivate: [PlayFeatureGuard],
    data: {
      featureFlag: "feat-next-gen-dashboard-enabled",
      fallbackRoute: "/dashboard",
    },
  },
];

---

<!-- Boolean flags -->
<div *playFeatureFlag="'feat-new-dashboard-2025-q3'">
  <h2>New Dashboard</h2>
  <p>This content is only visible when the flag is enabled.</p>
</div>

<!-- Variant flags -->
<div *playFeatureFlag="'feat-experiment'; playFeatureFlagVariant: 'treatment'">
  <h2>Experimental Feature</h2>
  <p>This shows the treatment variant.</p>
</div>

---

<!-- In *ngIf -->
<ng-container *ngIf="'feat-new-analytics' | playFeatureFlag">

```

```

    <app-analytics-widget></app-analytics-widget>
</ng-container>

<!-- Display flag status -->
<p>
  New Dashboard: {{ 'feat-new-dashboard' | playFeatureFlag ? 'Enabled' :
    'Disabled' }}
</p>

<!-- Variant checks -->
<p>
  Experiment Variant: {{ 'feat-experiment' | playFeatureVariant:'control' }}
</p>

---

// hooks/useFeature.ts
import { useState, useEffect } from "react";
import { playfeature } from "../system/play.feature";

export function useFeature(key: string, defaultValue: boolean): boolean {
  const [value, setValue] = useState(() =>
    playfeature.isEnabled(key, defaultValue)
  );

  useEffect(() => {
    // A function to update state when flags change.
    const handleUpdate = () => {
      setValue(playfeature.isEnabled(key, defaultValue));
    };

    // Set initial value and subscribe to live updates.
    handleUpdate();
    playfeature.onUpdate(handleUpdate);

    // Clean up the subscription on component unmount.
    return () => {
      playfeature.offUpdate(handleUpdate);
    };
  }, [key, defaultValue]);

  return value;
}

---

// In a component:
// MainDashboard.tsx
import { useFeature } from "../hooks/useFeature";

```

```

function MainDashboard() {
  const showNewAnalyticsCard = useFeature("feat-new-analytics-card", false);

  return (
    <div>
      <UserInfoCard />
      {showNewAnalyticsCard ? <NewAnalyticsCard /> : <OldAnalyticsCard />}
    </div>
  );
}

---

// guards/play-feature.guard.ts
import { Injectable } from "@angular/core";
import { CanActivate, ActivatedRouteSnapshot, Router } from "@angular/router";
import { playfeature } from "@playplus/core"; // Assuming helper is available

@Injectable({ providedIn: "root" })
export class PlayFeatureGuard implements CanActivate {
  constructor(private router: Router) {}

  canActivate(route: ActivatedRouteSnapshot): boolean {
    const flagName = route.data["featureFlag"];
    if (flagName && playfeature.isEnabled(flagName)) {
      return true; // Allow access to the route
    }

    // If flag is off or doesn't exist, redirect away
    this.router.navigate(["/dashboard"]);
    return false;
  }
}

---

// app-routing.module.ts
import { PlayFeatureGuard } from "../guards/play-feature.guard";

const routes: Routes = [
  {
    path: "next-gen-dashboard",
    loadChildren: () =>
      import("../next-gen/dashboard.module").then((m) => m.DashboardModule),
    canActivate: [PlayFeatureGuard],
    data: { featureFlag: "feat-next-gen-dashboard-enabled" },
  },
];

```

```

import { PlayFeatureService } from '../services/playfeature.service';

@Component({...})
export class MyComponent {
  constructor(private playFeature: PlayFeatureService) {}

  ngOnInit() {
    if (this.playFeature.isEnabled('feat-new-dashboard-2025-q3', false)) {
      // Show new dashboard
    }
  }
}

```

---

```

import { PlayFeatureService } from '../services/playfeature.service';

@Component({...})
export class MyComponent implements OnInit, OnDestroy {
  private destroy$ = new Subject<void>();
  newDashboardEnabled = false;

  constructor(private playFeature: PlayFeatureService) {}

  ngOnInit() {
    this.playFeature.flag$('feat-new-dashboard-2025-q3', false)
      .pipe(takeUntil(this.destroy$))
      .subscribe(enabled => {
        this.newDashboardEnabled = enabled;
      });
  }

  ngOnDestroy() {
    this.destroy$.next();
    this.destroy$.complete();
  }
}

```

---

```

// Good - explicit default
this.playFeature.isEnabled("feat-new-dashboard", false);

// Good - explicit default for variants
this.playFeature.getVariant("feat-experiment", "control");

```

---

```

// Bad - relies on system default

```

```
this.playFeature.isEnabled("feat-new-dashboard");
```

---

```
// Good - abstracted in component
export class DashboardComponent {
  private readonly showNewDashboard = this.playFeature.isEnabled(
    "feat-new-dashboard-2025-q3",
    false
  );

  ngOnInit() {
    if (this.showNewDashboard) {
      this.loadNewDashboard();
    } else {
      this.loadLegacyDashboard();
    }
  }
}
```

---

```
// Bad - flag check in template logic
template: `
  <div *ngIf="playFeature.isEnabled('feat-new-dashboard')">
    <!-- content -->
  </div>
`;
```

---

```
// Document flag purpose and cleanup plan
/**
 * Flag: feat-new-dashboard-2025-q3
 * Purpose: Rollout new dashboard to 50% of users
 * Cleanup: Remove after Q3 2025 when 100% rollout is complete
 * Owner: team-core-ui
 */
```

---

```
// DON'T DO THIS
import { playfeature } from "../../system/play.feature";

if (playfeature.isEnabled("my-flag")) {
  // This violates Play+ guidelines
}
```

```

---

// DON'T DO THIS
if (this.playFeature.isEnabled("new-dashboard")) {
  // Flag name not in config
}

---

<!-- DON'T DO THIS -->
<div
  *ngIf="playFeature.isEnabled('feat-new-dashboard') && user.hasPermission('admin')"
>
  <!-- Complex logic in template -->
</div>

---

// DON'T DO THIS
@Injectable()
export class UserService {
  getUsers() {
    if (this.playFeature.isEnabled("feat-new-api")) {
      return this.newApi.getUsers();
    }
    return this.legacyApi.getUsers();
  }
}

---

import { PlayFeatureService } from '../services/playfeature.service';

constructor(private playFeature: PlayFeatureService) {}

---

this.playFeature.isEnabled("feat-new-dashboard", false);
this.playFeature.getVariant("feat-experiment", "control");

---

this.playFeature
  .flag$("feat-new-dashboard", false)
  .pipe(takeUntil(this.destroy$))
  .subscribe((enabled) => {
    this.showNewDashboard = enabled;
  });

```

```

    });

---

export class DashboardComponent {
  private readonly showNewDashboard = this.playFeature.isEnabled(
    "feat-new-dashboard",
    false
  );

  ngOnInit() {
    this.loadDashboard();
  }

  private loadDashboard() {
    if (this.showNewDashboard) {
      this.loadNewDashboard();
    } else {
      this.loadLegacyDashboard();
    }
  }
}

```

```

---

// config/play.feature.config.json
{
  "provider": "launchdarkly",
  "clientKey": "sdk-12345-abcde",
  "bootstrap": {
    "feat-new-dashboard-2025-q3": false,
    "enable-beta-analytics": true
  }
}

```

```

---

// Set user for targeted flags
this.playFeature.setUser({
  key: "user-123",
  email: "user@example.com",
  name: "John Doe",
  custom: {
    plan: "premium",
    region: "us-west",
  },
});
---

```

```

describe("DashboardComponent", () => {
  it("should show new dashboard when flag is enabled", () => {
    // Arrange
    playFeatureService.setFlag("feat-new-dashboard-2025-q3", true);

    // Act
    component.ngOnInit();

    // Assert
    expect(component.showNewDashboard).toBe(true);
  });

  it("should show legacy dashboard when flag is disabled", () => {
    // Arrange
    playFeatureService.setFlag("feat-new-dashboard-2025-q3", false);

    // Act
    component.ngOnInit();

    // Assert
    expect(component.showNewDashboard).toBe(false);
  });
});

```

---

```

// Log flag usage for analytics
this.playFeature
  .flag$("feat-new-dashboard", false)
  .pipe(takeUntil(this.destroy$))
  .subscribe((enabled) => {
    this.analytics.track("feature_flag_viewed", {
      flag: "feat-new-dashboard",
      enabled,
      user: this.currentUser.id,
    });
  });
}

```

---

```

// Monitor flag check performance
const start = performance.now();
const isEnabled = this.playFeature.isEnabled("feat-new-dashboard", false);
const duration = performance.now() - start;

if (duration > 10) {
  this.playlog.warn("Slow feature flag check", {
    flag: "feat-new-dashboard",
    duration,
    context: "dashboard-load",
  });
}

```

```

    });
}

---

import { playfeature } from "../../system/play.feature";

if (playfeature.isEnabled("my-flag")) {
    // logic
}

---

import { PlayFeatureService } from '../services/playfeature.service';

constructor(private playFeature: PlayFeatureService) {}

if (this.playFeature.isEnabled('my-flag', false)) {
    // logic
}

---

// Manual flag management
private flags = new Map<string, boolean>();

setFlag(key: string, value: boolean) {
    this.flags.set(key, value);
}

isEnabled(key: string): boolean {
    return this.flags.get(key) || false;
}

---

// Use PlayFeatureService
constructor(private playFeature: PlayFeatureService) {}

setFlag(key: string, value: boolean) {
    this.playFeature.setFlag(key, value);
}

isEnabled(key: string, defaultValue: boolean = false): boolean {
    return this.playFeature.isEnabled(key, defaultValue);
}

---

```

```
// Enable debug logging
this.playFeature.setFlag("debug-mode", true);

// Check all current flags
console.log("All flags:", this.playFeature.getAllFlags());

// Check flag metadata
const metadata = this.playFeature.getFlagMetadata("my-flag");
console.log("Flag metadata:", metadata);
```